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United States Patent [19]**Johnson**[11] **Patent Number:** **5,135,759**[45] **Date of Patent:** **Aug. 4, 1992****[54] METHOD TO PRESELECT THE SEX OF OFFSPRING****[75] Inventor:** **Lawrence A. Johnson, Silver Spring, Md.****[73] Assignee:** **The United States of America as represented by the Secretary of Agriculture, Washington, D.C.****[21] Appl. No.:** **692,958****[22] Filed:** **Apr. 26, 1991****Related U.S. Application Data****[63]** Continuation of Ser. No. 349,669, May 10, 1989, abandoned.**[51] Int. Cl.⁵** **A61K 35/52****[52] U.S. Cl.** **424/561; 436/63; 436/172; 435/2****[58] Field of Search** **436/63, 172; 424/561****[56] References Cited****U.S. PATENT DOCUMENTS**4,083,957 4/1978 Lang 424/105
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Intact X and Y chromosome-bearing sperm populations of rabbits and swine were separated according to DNA content using a flow cytometer/cell sorter. Sperm viability was maintained by special staining techniques and by sorting and collecting the sperm in nutrient media. The sorted sperm were surgically inseminated into the uteri of rabbits or swine. Of the offspring born from does inseminated with the sorted population of X-bearing sperm, 94% were females. Of offspring born from does inseminated with sorted Y-bearing sperm from the same ejaculate, 81% were males.

26 Claims, No Drawings